

REMARKS/ARGUMENTS

Reconsideration of the instant application and favorable action are solicited. In order to more particularly point out and distinct claim that which the applicant regards as his invention, independent claims 1 and 12 have been amended. No new matter is introduced.

5

1. 102 (b) rejection of claim 1:

Claim 1 was rejected under 35 U.S.C. 102(b), for reasons of record that can be found on pages 2-4 in the Office action identified above, which is Part of Paper No./Mail Date
10 20060926. Claims 1-3, 5-6, 8 and 10-11 were rejected as being anticipated by Ker (U.S. 6,576,958).

Ker discloses PMOS-bound and NMOS-bound diodes for ESD protection. The source/drain region enclosed by the control gate of the PMOS (or NMOS) is used as an anode (or cathode) of the PMOS-bound (or NMOS-bound) diode. The base of the PMOS
15 (or NMOS) is used as a cathode (or anode) of the PMOS-bound (or NMOS-bound) diode. The control gate prevents any shallow trench isolation region from forming beside the p-n junction of the PMOS-bound (or NMOS-bound) diode, such that the ESD sustaining level doesn't suffer from the formation of the STI regions. It is respectfully noted that, in Fig. 7 of Ker, a P⁺ region 44b and a P_LDD are situated between N⁺ region (cathode) and the
20 left side gate 50.

The applicant submits that the cited reference fails to teach the limitations of “a second ion diffusion region with a second conductivity type opposite to said first conductivity type, said second ion diffusion region being located in said ion well at the other side of said gate finger, said second ion diffusion region serving as a cathode of said
25 junction varactor” and “a second lightly doped drain (LDD) of said second conductivity type in said ion well, and wherein said second LDD merges with said second ion diffusion region and extends laterally to said gate finger”, as required in the amended claim 1. The

Appl. No. 10/711,140
Amdt. dated January 10, 2007
Reply to Office action of October 10, 2006

applicant believes that the amended claim 1 is allowable. Reconsideration of claim 1 is therefore politely requested.

As claims 2-3, 6, 8 and 10-11 are dependent on claim 1, they should be allowed if claim 1 is allowed.

5

2. 102 (b) rejection of claim 12:

Claim 12 was rejected because of Ker.

10 The applicant submits that Ker fails to teach the limitations of “a first N type lightly doped drain (NLDD) merging with said first N⁺ ion diffusion region and extends laterally to said first gate finger” and “a second NLDD merging with said second N⁺ ion diffusion region and extends laterally to said second gate finger”, as required in the amended claim 12. Reconsideration of claim 12 is therefore politely requested.

15 As claims 13 and 14 are dependent on claim 12, they should be allowed if claim 12 is allowed.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Appl. No. 10/711,140
Amdt. dated January 10, 2007
Reply to Office action of October 10, 2006

Sincerely yours,

Winston Hsu

Date: 01/10/2007

Winston Hsu, Patent Agent No. 41,526

5 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)